Quotas and Party Priorities: Direct and Indirect Effects of Quota Laws *

Ana Catalano Weeks†
University of Bath

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Abstract

In light of increasing numbers of women in politics, extant research has examined the role of women in the parliamentary party on agenda-setting. This paper complements that literature by exploring the effect of a gendered institution theorized to promote both numbers of women and awareness of women's interests: gender quota laws. I suggest that after a quota law, parties could have incentives to either reduce (*backlash effect*) or increase (*salience effect*) attention to women's policy concerns. Using matching and regression methods with a panel dataset of parties in advanced democracies, I find that parties in countries that implement a quota law devote more attention to social justice issues in their manifestos than similar parties in countries without a quota. Further, the paper shows that this effect is driven entirely by the law itself. Contrary to expectations, quota laws are not associated with increases in women in my (short-term) sample; it is thus no surprise that no evidence of an indirect effect through numbers of women is found. I interpret the findings as evidence of quota contagion, whereby quotas cue party leaders to compete on gender equality issues.

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†Assistant Professor. a.c.weeks@bath.ac.uk

> I had to fight to have a chapter in the program for instance. For gender equality...I wrote it, and then I presented it, there were no questions, no one made any comments. And it was one of the texts since the beginning everybody said, OK, that text is OK. So after that I had to proofread it myself to see if there were any mistakes or so on. I don't think anybody read it.
>
> –Viviane Teitelbaum
> Belgian politician (MR)[1]

> The issues of inequality are now a political problem. Even people of the right wing that didn't agree with the [quota] law, they now talk about the effects, how they will affect women, of several measures that are adopted by the government.
>
> –Maria de Belém
> Portuguese politician (PS)[2]

Do gender quota laws matter to parties' policy agendas, and if so how? As the channels that link a people to a government, political parties are perhaps the most important mechanism of representation (Sartori 2005). Decisions about party priorities set the bounds for future policy change. Recent examples are illustrative: in the U.S., President Obama fulfilled his party's campaign pledge to reform health care with the passage of the Affordable Care Act. In the U.K., the Conservative party promised to hold a referendum on whether to leave the E.U. and respect the outcome, and they have. While not deterministic (more on this later), party positions matter.

Previous literature suggests that environmental factors like public opinion, ideology, and organizational structure are the most important determinants of party priorities. Recently, several authors have contributed to this literature by demonstrating the significant role of descriptive representation, women in the party (Kittilson 2011; O'Brien 2012; Greene & O'Brien 2016). Gender quota laws are electoral laws or constitutional provisions requiring all parties to include a certain percentage of women in their party lists. This is the first study to address the link between quotas and party priorities. The contribution of this study is to address two key questions: 1) do parties change their priorities after a quota law is implemented, and 2) is the effect of a quota law

[1]Personal interview, Brussels, Belgium, 23 October 2013.
[2]Personal interview, Lisbon, Portugal, 7 November 2013.

independent from the effect of additional numbers of women?

The distinction between *quotas* and *women* is not trivial, and there are reasons to believe quotas could either dampen or reinforce the representation of women's policy priorities. On the positive side (*salience effect*), quotas can change the political culture to be more accepting of women in politics, in both parliaments (Galligan, Clavero & Calloni 2007; Burnet 2011; Xydias 2014) and among the general public (Beaman et al. 2008). They can also lead women elected via a quota to feel they have a mandate to act 'for' women, making them especially likely to support women's policy interests (Franceschet & Piscopo 2008). On the negative side (*backlash effect*), quotas might also lead to women elected via a quota feeling stigmatized and avoiding women's issues (Franceschet & Piscopo 2008) and there is a fear of resentful male politicians trying to prevent 'quota women' from exercising political power (Hawkesworth 2003; Heath, Schwindt-Bayer & Taylor-Robinson 2005). In light of this, can and will women elected after a quota act to pursue women's interests? Will (predominantly male) party leaders act differently with regards to women's interests?

This paper provides the first cross-country evidence that quota laws affect party agendas. While the question of whether other types of quotas like internal party quotas also lead to change is interesting, for the sake of this paper I focus on laws. This is because the imposition of quotas on parties that did not support them offers a good context to explore causal effects, using party level data. The imposition of a national level law might also shift the national debate and public opinion in ways that a party quota does not. I consider the possibility of positive and negative effects of a quota law on three positions characterized by a gender gap in preferences in advanced democracies: 1) social justice, 2) welfare state expansion, and 3) left-right position. To better understand the mechanisms driving the results, I conduct mediation analysis to tease apart direct and indirect effects; that is, effects of the law itself versus those channeled through women in the party. The quotations from interviews with politicians above indicate that after a quota, women might be better able to exercise power over the party program (as in the Teitelbaum quote) and

party leaders might be more likely to see gender equality as a 'political problem' that they can no longer ignore (de Belém).

To test this argument I analyze party positions as set out in manifestos, which come from the Comparative Manifesto Project (MARPOR; Budge 2001; Klingemann 2006; Volkens et al. 2016). Studying the causal effects of quota laws is difficult because quotas are not randomized, and countries that pass a quota (or parties that propose one) could differ from those that do not. To deal with this issue, I use statistical matching to match parties in countries that adopt a quota law to parties in countries that do not. Matching improves balance in the data set, reducing the dependence of the findings on statistical modelling assumptions. I then use this pruned data in models employing a difference-in-difference approach, which compares 'treated' parties in countries that get a quota law to 'control' parties that do not. As a robustness check, I remove parties that proposed the quota law, so that for the parties remaining the quota law can be seen as an exogenous change imposed on the party. The pruned data includes 40 parties in 16 countries from 1969 to 2011. I also show that results are similar using regression without matching.

I find no evidence of a backlash effect, and support for increased salience to some of women's policy concerns after a quota. Quotas increase party attention to social justice, but not welfare state expansion or the party's overall left-right position. Quota laws lead to a sizable 5.6 percentage point increase in party attention to social justice; i.e., a party that spent 10% of its manifesto discussing social justice would be expected to spend 15.6% of its manifesto on social justice after a quota law is implemented. The effect is driven entirely by the law itself. Contrary to common assumptions, I find no evidence that quotas increased numbers of women within the parties in my short-term sample. It is thus unsurprising that I also find no evidence of an indirect effect through numbers of women. I interpret these findings as evidence for quota 'contagion' on gender equality policies. After a quota law, parties increase competition on gender equality issues in order to target or retain women voters.

The paper proceeds as follows. First, I review the literature on party agendas and gender. I then propose two sets of hypotheses linking quotas and policy change, focusing on the direction of the effect and causal mediation. I test these claims using party manifesto data. The results present consistent evidence that quotas shift party attention to social justice issues, and that the (short-term) effect is direct rather than mediated by women. I conclude by discussing quotas as not only outcomes in the political process, but also important instigators of attitudes and behavior.

Quotas, Women, and Party Priorities

Party positions, as set out in manifestos, represent an early but crucial stage in the policy process: where the agenda is set. The manifesto provides a program for the winning party to follow and be held accountable for once in office. While parties are not bound by the contents of the manifesto, generally behavior in office correlates with manifesto promises (Klingemann et al. 1994; Walgrave, Varone & Dumont 2006; Mansergh & Thomson 2007; Naurin 2014). Previous work suggests that parties are more likely to keep their campaign pledges when they have more control over the government, but even parties in opposition can fulfill pledges (Thomson et al. 2012). Manifesto decisions are significant not just for the party's electoral success, but because they dictate the topics of political debate in a society. They have important implications for the quality of political representation afforded to women (and other groups). I focus on advanced democracies in this study because my theory is based on gender differences in policy preferences, which are well-established in developed democracies but not elsewhere. I also note that investigating party-level policy change is important in this context of generally strong parties, but would not be as relevant in countries where parties are weak.

Existing scholarship suggests that parties change their positions in response to environmental factors, such as shifts in public opinion (Adams et al. 2004, 2006; McDonald & Budge 2005;

Ezrow 2007), economic conditions (Adams, Haupt & Stoll 2009; Haupt 2010; Burgoon 2012), and how the party did in the last election (Somer-Topcu 2009). Thus far, only a handful of studies have focused on the impact of women on party positions, and no study has considered the role of gender quotas. Notably, Kittilson (2011) finds that the share of women and women's organizations in the party are associated with increased attention to social justice, but not welfare or education, in party platforms. More recently, Greene and O'Brien (2016) find that parties with greater shares of women are associated with increased diversity of issues in the manifesto, and tend to shift leftward. Informed by this literature, the main contribution of this study is to measure the effect of *quotas*, rather than gender, on party priorities.

It is often difficult to distinguish quotas from gender; quota laws typically apply to all candidates, for example (Franceschet, Krook & Piscopo 2012; Hughes, Paxton & Krook 2017). Yet, several studies have made progress on this question using natural experiments or methodological advances. For example, in their work on quotas and qualifications Weeks and Baldez (2015) use a unique institutional setup in Italy whereby the quota law applied to only one part of the electoral system to distinguish quotas from women. In a study of party leadership, O'Brien and Rickne (2016) use a natural experiment in Sweden whereby the quota was imposed by the national party on local branches, impacting numbers of women in some branches more than others. Continuing in this vein, this study endeavors to assess quota effects on party priorities. Below, I build on the literature on gender quotas and critical mass theory to suggest two alternative hypotheses: quotas might have either a *salience effect* or a *backlash effect*.

Quota laws apply to all political parties in a country, theoretically leading to an increase in women that is more balanced across parties than typical 'organic' growth (which tends to be driven by parties on the left). If women's interests transcend party – and many studies find that gender gaps in policy preferences persist even within parties (Poggione 2004; Barnes & Cassese 2017), then the quota opens up a wider group of parties to change. Quotas also lead to greater

numbers of women in leadership positions (O'Brien & Rickne 2016), and party leaders typically have a great deal of influence on the agenda and encourage other women to participate (Blumenau 2017). The women elected via a quota might also feel a particular 'mandate' to act for women (Franceschet & Piscopo 2008; Childs & Krook 2012). Finally, as I discuss in more detail below, by raising the issue of gender equality in politics to the national stage, quota laws can also shift political culture, encouraging more attention to gender equality concerns. Thus, quotas might lead to better representation of women's interests:

H1a: Salience effect: Quotas increase party attention to women's policy priorities.

The opposite might also be true: quotas might elicit a backlash among those who disagree with their imposition. Increasing numbers of women may prompt resistance from the traditional majority, men. According to 'intrusiveness' theory (Blalock 1967), when minorities like women in politics are small in number they are perceived to be nonthreatening. As minority numbers grow, majority groups are more likely to feel threatened and react negatively (see also Krook 2015). Quotas might cause particular consternation because they necessitate men being replaced by women, rather than simply increasing numbers of women. We see early examples of quota resistance in the creative loopholes that parties find to avoid implementing a quota within their party (e.g., Baldez 2007; Fréchette, Maniquet & Morelli 2008).

Quota scholarship also suggests that resistance can persist after the quota law successfully increases numbers of women. In Uganda, for example, women from reserved seats are less likely to be recognized in debate compared to their male and female colleagues elected via open seats (Clayton, Josefsson & Wang 2014). A survey of Flemish politicians a decade after the first quota law passed reveals men and women have polar opposite views on the legitimacy of quotas in politics and their effects on candidate quality (Meier 2008). This kind of resentment could easily bleed into formal and informal party rules and behavior. In a study of parties in Catalonia, Verge and de la Fuente (2014) find that myriad informal intraparty practices contribute to women's lack of agency

within the party after a quota law. Thus, quotas could lead to less attention to women's policy priorities:

H1b: Backlash effect: Quotas decrease party attention to women's policy priorities.

I propose two alternative mechanisms through which quotas might shift policy priorities. First, increased numbers of women might influence party agendas in several ways. A 'critical mass' of women after a quota law could have more leverage to negotiate and push the party towards their collective preferences (Kanter 1977). In a more gender-balanced environment, women may feel more comfortable expressing 'gendered' preferences, and men more likely to be receptive to their views. Mendelberg et al. (2013) find that as numbers of women increase so does their authority, and that with a critical mass women begin discussing different issues (such as caring responsibilities). Additional numbers of women could also influence party manifestos through their ascent to positions of power within the party (O'Brien & Rickne 2016). Over time quotas are likely to increase the number of female party leaders, who can then influence the content of the manifesto more directly. Of course, an influx of women might also be more threatening to male politicians than the status quo, leading them to resist women's interests. Thus, the first potential mechanism through which quotas influence policy priorities is *indirect*:

H2a: The effect of quota laws on policy priorities is mediated by the increase of women in the parliamentary party.

The second way in which quotas can influence intra-party decisions is through changes to expectations and norms about women in politics. Quota policies increase public awareness and support for women in politics, which might cue party elites to prioritize women's concerns. Studies suggest that quotas attract media attention to (the lack of) women in politics (Sacchet 2008; Sénac-Slawinski 2008). Rather than being an 'one-off' change, quotas tend to highlight the issue of women in politics repeatedly at every subsequent election, with media coverage comparing how parties are faring (which aren't complying?) and who the female candidates are. For example,

Portugal passed a quota law in 2006. In the most recent 2015 federal election – the third since the quota law – national newspapers covered the share of female candidates and elected MPs, referencing the 2006 law specifically. Some of the headlines include "Men continue to dominate electoral lists. Only 25% of the 2015 heads of lists were women" (*Espresso*, 5 October 2015) and "History was made. One-third of the seats will be occupied by women" (*Observador*, 5 October 2015). Media also paid particular attention to whether specific parties complied with the quota requirements.[3]

Initial evidence suggests that quotas can lead the public to change their views about the role of women in politics in a positive direction (Beaman et al. 2008; Burnet 2011), although I note the need for more research in this area. Such shifts in media attention and public attitudes are likely to affect the incentives and strategies of party leaders. Specifically, elites might use party manifestos to associate the party with women's policy concerns in order to raise their visibility on these issues and claim credit from female constituents (Mayhew 1974). It is also possible that changing norms are internalized by party elites themselves (coming to believe that more balanced representation is normatively appropriate), regardless of electoral incentives. Because existing research fails to link quota laws to negative public attitude or media shifts, I note that this mechanism is more likely to explain a positive shift in party policies (salience effect) than a backlash. Thus, the second mechanism through which quotas might affect policy agendas is *direct*:

H2b: The effect of quota laws on policy priorities is driven by the institution of the quota law itself, rather than channelled through women.

Figure 1 presents a visual depiction of the argument, showing various predictions for how direct or indirect mechanisms could link quota laws to party agendas. As the left column of the figure shows, if the effect of a quota law is positive (salience), it could be due to direct or indirect

[3]Some examples are: "For the first time, the list of PSD / Azores has more women than men" (*Publico*, 16 June 2015), "List of PS in Santarem violates parity law" (*Espresso*, 28 August 2015), "Setúbal is the district with most women elected as heads of lists" (*Espresso*, 6 October 2015).

Mechanism	Party Response: Salience (+) **Hypothesis 1a**	Party Response: Backlash (–) **Hypothesis 1b**
Direct (Law itself) **Hypothesis 2b**	Increased public attn. cues parties to increase competition on women's issues	Party can ignore law (no effect expected)
Indirect (Women) **Hypothesis 2a**	Increased numbers of women represent women's interests	Increased numbers of women provoke adverse reaction among men

Figure 1: Predicted Effects of Quota Laws on Policy Priorities

mechanisms. A quota law, and the positive public attention it generates around women in politics, could signal parties to increase competition on women's issues (top left cell). Alternatively – or additionally – the effect of quotas could be driven by increased numbers of women (bottom left cell). The right column shows that if quota laws instead have a negative impact on women's policy priorities (backlash), the indirect mechanism is likely driving the effect. There is little reason to believe that a quota law which does *not* disrupt party selection procedures or displace men would lead to backlash. In this case, the party can simply ignore the law and no change in emphases is expected (top right cell). A backlash is more likely to be precipitated by unwanted 'shocks' to women in the party (bottom right cell).

Data & Methods

The discussion so far suggests that we should see a relationship between quota laws and party attention to women's policy preferences. However, quota laws are not randomly assigned to countries, and the concern for causal inference is that countries that adopt quota laws, or parties that propose them, may be self-selecting based on some observable or nonobservable factors. Endogeneity is possible at both country and party level. At the country level, countries that pass quota laws might be characterized by different culture or attitudes towards women, which might also influence party priorities. At the party level, similarly, parties that propose a successful quota law might be characterized by different cultures and ideologies (for example they tend to be more left-wing), and this could also influence subsequent priorities.

To deal with potential endogeneity at party level, I use statistical matching to pre-process the data and match parties in countries that adopt a quota law to parties in countries with no quota (Ho et al. 2007). The goal of matching is to reduce imbalance of potential confounders between 'treated' and 'control' groups (Stuart 2010). More balanced data more closely approximate data that might have resulted from a randomized experiment, reducing model dependence and improving the argument for causal inference (Ho et al. 2007; Imai, King & Stuart 2008; King & Nielsen 2016). Because the units to be matched are panels rather than observations (i.e., parties and not party-election-years), I use a procedure applied in previous studies using matched panel data (Simmons & Hopkins 2005; Hollyer & Rosendorff 2012). For a party in a country that gets a quota law in election-year t, I average observed covariates in all years prior to t. For all parties in countries that do not qet a quota law, I average observed covaraties for all election-years available. Using this compressed dataset, where the unit of observation is the party, I match parties that get a quota law to parties that never get a quota law. Nearest-neighbor Malahanobis matching is employed, conducted without replacement. This means that each pair consists of a party in a country that implements a quota law, and a party in a country that does not. I then decompress the (cross-sectional) data, so

that the unit of observation is again the party-election-year (time-series cross-sectional).

Using the pruned data set, I then employ a difference-in-difference approach by estimating regression models that include both party- (which in linear combination are equal to country-) and year fixed effects. The coefficient estimates measure the link between quota laws and priorities within parties over time, relative to parties that do not get a quota law. The 'treated' group is parties in countries that get a quota law and the 'control' is matched parties that do not get a quota law. Fixed effects models control for any party or country-specific omitted variables (observable and unobservable) that are constant over time – a potentially large source of omitted variable bias. The difference-in-difference approach thus helps to address endogeneity concerns at the country level, given the parallel trends assumption holds – that trends in policy priorities would have been the same across parties and countries in the absence of a quota law. I test for the validity of this assumption by estimating a dynamic panel model with leads and lags on quota implementation and including unit-specific time trends. Additionally, I show that the results hold estimating the same models using the full data set (without matching).

The baseline model with party and year fixed effects can be written as:

$$Y_{it} = \beta_1 Quota\ Law_{it} + \beta_2 Z_{it} + \alpha_i + \eta_t + \mu_{it}$$

where Y_{it} is the outcome of interest and measures party positions in party i in the year t; *Quota Law* is a dummy variable equal to 1 after the implementation of a quota law and 0 otherwise, and β_1 is the coefficient for this main independent variable; Z_{it} represents a vector of covariates, and β_2 the coefficients for these covariates; α_i and η_t are party and year fixed effects, respectively; and μ_{it} is the error term. All right-hand side variables are lagged by one election-year because party manifestos are written before the election. I use robust standard errors clustered by election to address the concern that unobserved election-specific factors may influence all parties' policy priorities in a

given election, leading to correlated errors among the parties standing in that election (Rogers 1994; Williams 2000).

I analyze party priorities using party manifestos data from the Comparative Manifesto Project (MARPOR). MARPOR measures party positions on particular policy issues in the party's election-year manifesto. MARPOR coders match up 'quasi-sentences' (which can be a full sentence, a clause, or a bullet point) in the manifesto with a category of policy. Each category is standardized by taking the total number of quasi-sentences coded in the same document as a base. The resulting percentage can be taken as a measure of the party's policy priorities (Budge 2001; Klingemann 2006; Volkens et al. 2016). Manifestos are only coded in election years (observations are not retained through the inter-election period).[4]

The full data set includes 132 parties in 21 countries from 1969 to 2011.[5] The matched data set is generated from this using the MatchIt package in R version 3.3.1 (Ho et al. 2011). To specify the covariates to be used in matching, I consider how the adoption of quotas is related to well-established determinants of policy priorities. The key issue is whether there is something else that contributes to both a quota being adopted and a shift in policy priorities, e.g. an underlying cultural norm shift in favor of women. I match on five variables potentially linked to quota laws and party priorities: *Women in Party*, *Party Family*, *Party Quota*, *Vote Share*, and *Year*. The resulting dataset consists of 20 'treated' parties that get a quota, and 20 'control' parties that do not, from 16 countries. The matching process reduces the multivariate imbalance statistic from 0.95 to 0.75, significantly improving the balance of the sample. Technical details of the matching procedure, a discussion of all variables used and considered for matching, and results on balance are reported in Appendix A.

[4]The MARPOR data has been criticized by many scholars for how it estimates policy positions and scales the data into L-R positions; however, because this paper evaluates change in relative policy emphasis over time (what the data was originally intended for) these concerns are not as relevant (Gemenis 2013).

[5]The countries included are: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Great Britain, Greece, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, and the United States.

To operationalize the main dependent variables, I consider how existing data on party priorities relates to women's policy concerns, as measured using survey data of gender gaps in policy preferences. Women are more liberal and favor more government spending overall compared to men across developed countries, even controlling for class and party (Svallfors 1997; Edlund & Pande 2002; Huber & Stephens 2000; Lott & Kenny 1999; Iversen & Soskice 2001; Iversen & Rosenbluth 2006; Barnes & Cassese 2017). Specifically, analysis of ISSP survey data finds large gender gaps in preferences on the issues of maternal employment, government intervention, and social spending (including healthcare, pensions, and unemployment), with women being more progressive than men in advanced democracies. These gender gaps might derive from the decline of marriage and corresponding higher rates of poverty for women over recent years, or because of women's increasing labor force participation (and associated need for affordable care services) (Edlund & Pande 2002; Iversen & Rosenbluth 2010). Similarly, analysis of survey data show that women are more likely to support gender equality than men – e.g., to disagree with statements like, 'a woman's job is to look after the home' (ISSP Family and Changing Gender Roles Survey) (Weeks 2016). Accordingly, I would expect women's preferences for social policies and gender equality to be reflected more accurately after a quota law is passed.

The main dependent variables are the share of party manifesto devoted to three MARPOR policy categories capturing women's preferences: 1) *Social Justice*; 2) *Welfare State Expansion*; and 3) *Left-Right Position*. *Social Justice* includes any mention of social justice and the need for fair treatment of all people, including the end of sex-based discrimination, as well as equality for other under-privileged groups including race, class, sexuality, and disability. *Welfare State Expansion* includes favorable mentions of the need to introduce, maintain, or expand any social service or social security scheme, and support for social services such as child care, healthcare, retirement, and unemployment benefits. *Left-Right Position* is the left-right position of party, as given in Lowe et al. 2011's log ratio scale (found to better reflect the importance a party attaches to policy areas than the original composite version). According to the theory, we should expect political parties

to either increase (H1a) or decrease (H1b) the attention they devote to *Social Justice* and *Welfare State Expansion* after a quota law is passed, and to move to the left (H1a) or right (H1b) on the *Left-Right Position*.

The key independent variable is *Quota Law*, a binary variable coded "1" for parties in countries which have a national quota law, after the law was implemented (including and after the first election in which the quota was in operation). In my dataset, five countries have passed a quota law: Italy (since repealed), Belgium, France, Spain, and Portugal. It is important to note here that, because quota laws are relatively recent and it was necessary to lag this variable, the parties included in this study had a quota law for up to three consecutive election-years.[6] Thus, the results should be interpreted as short-term effects of a quota law.

Relevant covariates used in matching pre-processing are retained as controls in regression analysis (*Vote Share* and *Party Quota*).[7] The fixed effects account for many time-invariant confounders which would otherwise be included, including party family, electoral system, and history of religious conservatism in a country. I also control for *Log(GDP per capita)* and *Female Labor Force Participation*, both variables hypothesized to transform sex roles and attitudes towards women as societies shift away from materialist values (Norris 1985; Inglehart & Norris 2000). I control for *Effective number of parties* because party systems with a greater number of parties might be more responsive to new issues than two-party systems (where there is less likely to be competitive diffusion) (Matland & Studlar 1996; Kittilson 2011). Appendix B shows the summary statistics for all parameters used in analysis, and provides details about data sources.

[6] In the matched data, of the 20 parties included that get a gender quota law, observations are included for all 20 in the first election-year (year of implementation), 19 of the 20 in the first election-year after implementation, and 6 in the second election-year after implementation.

[7] Note that *Quota Law* and *Party Quota* are not strongly correlated; the correlation coefficient is 0.26.

Results and Discussion

Table 1 reports the results showing the effects of quota laws on party positions. The models in Table 1 control for omitted variable bias both across time and political parties, and should be interpreted to estimate within-unit changes in treatment. The analysis uses matched data; analysis using the full data set returns similar results and is available in Appendix D. I find no evidence for a *backlash effect* (H1b); quotas do not significantly decrease attention to women's policy concerns, nor do they cause parties to move to the right. Providing some support for hypothesis 1a (*salience effect*), the estimates imply that after a quota is implemented parties shift their positions on social justice, but not welfare state expansion or left-right position. The coefficient of 5.6 on *Quota Law* indicates that a one-unit change in *Quota Law*, i.e. going from not having a quota to implementing a quota, is associated with a 5.6 percentage point increase in party attention to social justice. For example, a party that devotes 5% of its manifesto to social justice (the mean) would be expected to spend double the amount – 10.6% – of its manifesto on social justice issues after a quota law. Using regression without matching, the effect of a quota law is slightly smaller (4% increase; see Table D1 in Appendix D); although as previously discussed, because the matching results rely less on untestable modelling assumptions (such as which parametric model to choose) I believe them to be more credible (see Appendix A for more).

The coefficient estimates for *Quota Law* in Models 2 and 3, however, are not significant. Parties that get a quota law are no more likely to prioritize welfare state expansion or shift left-right direction than parties without a quota law.[8] This suggests that quota laws do not lead parties to change positions on more traditional issues like welfare, issues that have long been fundamental to left-right politics (Lipset & Rokkan 1967; Allan & Scruggs 2004; Bartolini & Mair 2007; Benoit, Laver et al. 2006). This finding aligns with evidence from Kittilson 2011, who demonstrates that

[8]In robustness checks, models using the original left-right score from the comparative manifesto data showed similar results (quotas not statistically significant).

Table 1: Effects of Quota Laws on Policy Priorities

	Dependent variable:		
	Social Justice	Welfare State Expansion	Left-Right Position
	(1)	(2)	(3)
Quota Law$_{(t-1)}$	5.643^{***}	1.596	0.430
	(1.481)	(2.374)	(0.284)
Party Quota$_{(t-1)}$	0.446	-0.277	0.113
	(0.944)	(1.173)	(0.157)
♀ Labor Force Part.$_{(t-1)}$	.085	0.179	0.002
	(0.211)	(0.232)	(.028)
Vote Share$_{(t-1)}$	0.011	-0.129^{*}	0.020^{**}
	(0.031)	(0.055)	(0.007)
Effective no. of parties$_{(t-1)}$	-0.134	0.079	0.160^{*}
	(0.586)	(0.652)	(0.081)
Log(GDP per capita$_{(t-1)}$)	-10.864^{**}	-2.471	-0.230
	(3.384)	(4.147)	(0.508)
Constant	105.961^{***}	13.345	2.781
	(30.129)	(37.313)	(4.672)
Observations	282	282	282
R^2	0.651	0.551	0.736
Adjusted R^2	0.500	0.357	0.621
Year fixed effects	Yes	Yes	Yes
Party fixed effects	Yes	Yes	Yes

$^{\cdot}$p<0.1; *p<0.05; **p<0.01; ***p<0.001

Note: Robust standard errors clustered around election in parentheses.

the share of women in the party is a significant indicator of social justice mentions in the manifesto, but not welfare state expansion.

As a robustness check, I estimate a dynamic panel model, which estimates the treatment effect on social justice in the time periods before and after quota implementation (leads and lags). Figure 2 plots the coefficients and 95% confidence intervals from a model including three leads and two lags of the quota law variable (in addition to the full set of fixed effects and covariates). The results show no 'placebo' effect before the law was implemented, strengthening the plausibility of the parallel trends assumption and a causal interpretation of results. Recall that because manifestos are written before the election, the first election-year in which quotas ought to have an impact is the election after implementation, and reassuringly this is what the figure shows.[9]

The next hypotheses focus on the mechanisms driving the link between quotas and policy priorities. Models 1 and 2 of Table 2 investigate whether women in the party accounts for the the relationship between quotas and social justice policy (H2a), or the effect is instead direct (H2b).[10] To investigate the indirect effect of increased women's representation due to a quota law, I follow Kenny and colleagues' three steps for showing mediation effects (Baron & Kenny 1986; Judd & Kenny 1981, 2010). These can be summarized as: 1) Show that the causal variable is correlated with the outcome; 2) Show that the causal variable is correlated with the mediator; 3) For partial / complete mediation, show that the effect of the causal variable on the outcome while controlling for the mediator is reduced / zero.

[9]I also run models with party-specific time trends, which is an alternative way to test the robustness of the difference-in-differences identification. When these trends are included, the identification relies on there being a sharp change in the outcome at the date of treatment rather than an effect that grows gradually (Pischke 2005). I expect a more gradual change as numbers of women and the salience of the law increases, and in fact the coefficient on quota law is positive but no longer significant in this model (p = .2; Appendix D). While gradual changes are hard to pick up with party-specific time trends, these results also suggest that it's not possible to fully disentangle underlying trends from the causal effect of quotas.

[10]Additional specifications (not shown to save space) looking at the dependent variables of Welfare State Expansion and Left-Right Position returned no significant findings for mediation. I also investigated including women in party leadership as a mediator. While Greene and O'Brien (2016) recently collected excellent data on gender and party leadership, unfortunately there are large gaps in the data for many of the parties included here.

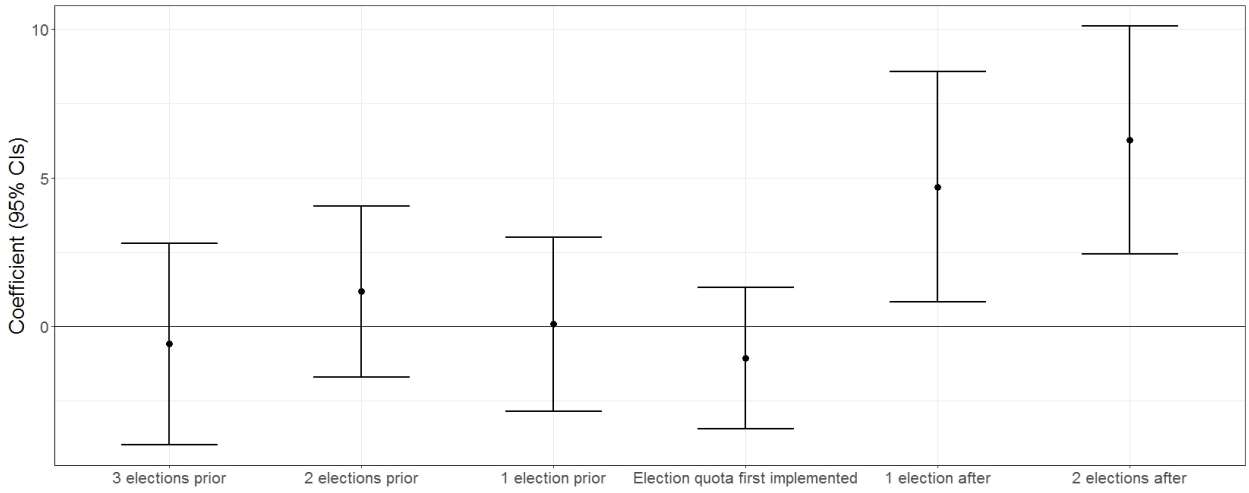

Figure 2: Effect of Quota Laws on Social Justice Priorities
(Election-Years Before / After Quota Law Implemented)

Notes: Estimates with 95% confidence intervals (based on robust standard errors clustered by election) from dynamic panel regression including party and year fixed effects and indicator variables for three leads and two lags (matched data). Recall that because manifestos are written before the election, the first election-year in which quotas ought to have an impact is the election after implementation, and this is what the figure shows.

Table 2: Mediated Effects of Quota Laws on Policy Priorities

	Dependent variable:	
	Women in Party$_{(t-1)}$	Social Justice
	(1)	(2)
Quota Law$_{(t-1)}$	$-7.764.$	5.674^{***}
	(4.076)	(1.487)
Women in Party$_{(t-1)}$		0.004
		(0.025)
Party Quota$_{(t-1)}$	6.448^{**}	0.419
	(2.073)	(0.999)
♀ Labor Force Part.$_{(t-1)}$	0.415	0.083
	(0.391)	(0.212)
Vote Share$_{(t-1)}$	0.074	0.010
	(0.106)	(0.032)
Effective no. of parties$_{(t-1)}$	0.091	-0.135
	(1.074)	(0.589)
Log(GDP per capita$_{(t-1)}$)	$-.087$	-0.108^{**}
	(0.067)	(0.034)
Constant	67.903	105.686^{***}
	(62.278)	(30.119)
Observations	282	282
R^2	0.628	0.651
Adjusted R^2	0.467	0.497
Year fixed effects	Yes	Yes
Party fixed effects	Yes	Yes

$^{\cdot}$p<0.1; *p<0.05; **p<0.01; ***p<0.001

Note: Robust standard errors clustered around election in parentheses.

Model 1 of Table 1 shows that the causal variable (*Quota Law*) is related to the outcome. Yet Model 1 of Table 2 fails to provide evidence that the causal variable is correlated with the mediator, *Women in Party*. The coefficient is negative although not statistically significant at the conventional level (p = 0.07). I attribute this finding to both the short-term nature of this study (recall that parties in this study had a quota law for up to only three consecutive election-years, and most for two), and the structure of quota laws in these countries. For example, in France parties notoriously shirked the quota for years because they could pay a fine instead (Fréchette, Maniquet & Morelli 2008; Murray, Krook & Opello 2012; see also Schwindt-Bayer 2009). This is not due to the lagged quota variable (which does not capture effects in the year of quota implementation); in Appendix D I run models where the right-side variables are not lagged, and results do not change. Model 1 of Table 2 suggests that, on average, the short-term effects of quotas on women within parties in these countries were minimal.

The final step in mediation, Model 2 of Table 2, shows that the potential mediator *Women in Party* is not a significant predictor of social justice emphasis, and its inclusion does not reduce the size of the effect of *Quota Law* at all (compare to Model 1 of Table 1). Causal mediation analysis using the potential outcomes framework (Imai, Keele & Tingley 2010), similarly, shows no evidence of indirect effects.[11] Additionally, I fit models including the variable *Quota Impact*, defined as the change in women's descriptive representation following quota implementation (rather than a binary variable) (O'Brien & Rickne 2016). While the quota impact variable has a large range (-40 to 50), the mean is close to zero (0.6), again suggesting that overall quotas in these countries had minimal impact on women in the party. The coefficient on *Quota Impact* is close to zero and not significant at conventional levels in these models (see Table D2 in Appendix D).

In line with Hypothesis 2b, this suggests that the (short-term) effect of quota laws is direct, rather than channeled through increases of women in the party (Hypothesis 2a). The quota

[11]To estimate the mediated effects of women in the party on social justice policy positions, I use the mediation package in R (results not shown to save space) Tingley et al. 2014.

law itself cues parties to devote more attention to social justice issues. Given that quota laws were not successful at increasing numbers of women in this sample of parties, it is no surprise that the effect of quotas is not driven by women. Of course, over the long-term and as quota laws gain stricter placement mandates and enforcement mechanisms, this could change. Overall, the results here suggest that parties prioritize social justice after a quota whether the quota increases numbers of women or not. This finding provides some of the first evidence that, as a gendered institution, quotas affect party behavior independently of their influence on party demographics.

I take several steps to ensure that findings are not the result of model misspecification. Robustness checks include estimating models that include a lagged dependent variable rather than fixed effects, models that drop political parties responsible for proposing quota laws, and models that exclude one country at a time to ensure results aren't driven by a single country. My findings are robust to these alternative specifications, which are presented in Appendix D to save space.

The Direct Effect of Quota Laws on Social Justice Emphasis

What can explain why quotas influence social justice priorities but not other issues that women prefer, and what drives the effect if not women in the party? To unpack these findings, in this section I propose a contagion mechanism driving the direct effect, whereby the quota law cues parties to ramp up competition on gender issues. I provide initial evidence to support this theory from statistical tests and interview data.

Welfare state expansion and overall left-right position are issues that structure the fundamental divide over politics in most countries, which is still typically class-based. Parties have well-defined positions on these issues, and they might be particularly sticky given the constraints of ideological reputation and issue ownership (Downs 1957; Budge, Robertson & Hearl 1987). The issue of social justice for underprivileged groups (beyond class) has not traditionally structured

party competition, and parties might therefore have more flexibility on this issue, particularly when cued by events and changing public opinion to address it. Additionally, it could be easier for parties to prioritize social justice policies that have smaller budgetary implications than welfare expansion. The quota law, and subsequent related media coverage, thus could signal to parties that gender equality is an important political issue and spur further competition on comparatively flexible and 'cheap' gendered policies.

Past studies have demonstrated a similar type of 'contagion', where parties shift policies in order to respond to pressures from other parties and the electorate, including specifically on the issue of gender quotas (e.g., Kolinsky 1991; Matland & Studlar 1996; Kittilson 2006). One example is further legislation on gender quotas. In author interviews with party leaders and politicians in Belgium, the 2011 law adopting gender quotas for boards of listed and state-owned companies was frequently brought up across parties as a specific example of how quota laws shifted the political agenda.[12] Support for the 2011 quota law was widespread, backed by parties across the left and mainstream right. One plausible reason for this is that the initial quota law garners sympathetic media support over time. It establishes a norm in gender equality that paves the way for similar arguments in another sector (Meier 2013). One politician commented that, "We will win in public opinion because the media writes in favor of us. And that is different also because in the past they weren't supportive of us, but now there are more women in the media also."[13] A minister's adviser in Belgium commented that her country was also supporting EU-level board quotas (the Reding Directive), while many countries with high levels of women (but no quota law; e.g., Sweden) were opposing it. "I think France and Belgium and the countries with the quota law are the ones supporting it," she said.[14] While this is just one example of how quotas can shift policy priorities, it highlights the potential role of a norm shift, media support, and public opinion in driving parties

[12]Els Van Hoof, personal interview, 16 October 2013, Brussels, Belgium; Niki Dheedene, personal interview, 8 October 2013, Brussels, Belgium; Viviane Teitelbaum, personal interview, 23 October 2013, Brussels, Belgium; Sabine de Bethune, personal interview, 5 September 2013, Brussels, Belgium.

[13]Els Van Hoof, personal interview, 16 October 2013, Brussels, Belgium.

[14]Niki Dheedene, personal interview, 8 October 2013, Brussels, Belgium.

to prioritize equality issues after a quota law.

We might expect contagion particularly among parties of the left, due to increasing competition on gender equality promotion with the rise of 'New Left' parties (Caul 1999; Keith & Verge 2016). In Appendix C, I consider whether party ideology conditions the effects of a quota law. The effect of a quota law on social justice positions is larger for left parties (the coefficient increases to 6.9, compared to 4.4 for right parties), although the interaction between quota and party ideology is not statistically significant. Similarly, I consider whether effects might be moderated by whether the party has an internal quota provision; perhaps those parties with voluntary quotas are exactly the ones likely to ramp up competition on gender issues after the quota law. I find some borderline significant evidence of this in Appendix C; the interaction is significant at the 0.1 level. The coefficient for parties with voluntary quotas is 7 compared to 4.6 for those without such provisions (very similar to left and right parties). These tests suggest that effects are partially driven by progressive parties which already compete on gender equality issues.

While progressive parties might see a quota as a signal to ramp up competition on gender equality, parties that did not support the law might feel an added incentive to develop their positions addressing women's interests in order to compensate for past opposition. One interesting finding from the robustness checks is that the effect of quota laws on social justice emphasis is slightly larger when parties that proposed the quota law are excluded (the coefficient for quota law is 5.92 for this sample compared to 5.65 in the original sample). This is consistent with the idea that parties are over-compensating for quota opposition after the fact by paying more attention to 'women's issues'. In short, the contagion mechanism applies across parties – evidence suggests it might be slightly larger for those who already compete on gender issues (those with an internal quota), but that it also holds for right parties and those that did not support a law. The results can be interpreted as cross-party evidence for quota 'contagion' in priorities, although not necessarily restricted to the expansion of *quotas* alone. Because the category of social justice is broader than quotas or gender

equality, additional research is necessary to understand exactly how quotas affect the variety of social justice policies.

Conclusion

This article examines the impact of quota laws on party positions in advanced democracies. It finds that parties in countries with gender quota laws increase the attention they give to social justice. Gender quota laws increase coverage of social justice issues even after using statistical matching to reduce concerns about endogeneity, including party and year fixed effects, and controlling for time-varying potential confounders. The findings reject the notion that quotas have a *backlash effect*, and generally support the theory of a *salience effect*. The effect of a quota is driven directly by the institution of the law itself, rather than by associated increases in numbers of women. I interpret these results as evidence for quota-driven 'contagion' on equality. At least in the short term, quotas affect party positions by cueing party leaders to compete on gender equality.

The findings are important for three main reasons. First, gender quotas are increasingly being introduced in countries across the world. This study confirms that quota laws are an effective tool to increase women's substantive representation at an important stage of the policymaking process: agenda-setting. Quotas can expand the scope of decision-making beyond standard issues of importance to dominant groups. Yet the question of whether party priorities translate into policy outcomes remains. The quotation from Belgian politician Viviane Teitelbaum at the start of this paper – the gender equality chapter goes in the party program, but no one in the party reads it – leaves room for doubt. And does the public discern these shifts? Some research finds that there is lingering public doubt about whether parties will fulfill their campaign promises (Naurin 2011). A natural extension of this work is to explore the effects of quotas on public opinion, such as survey data about which party is best able to handle social justice concerns, and actual policy

outcomes, such as legislation and spending on issues related to social justice policies (e.g., Clayton & Zetterberg 2018).

The findings also suggest caution in interpreting the potential scope of quotas' effects across policy areas. National quota legislation is an effective mechanism for increasing women's substantive representation within parties, but only on issues directly related to equality. I find no evidence that quotas lead to changes on important, 'sticky' issues at the core of a party's identity: welfare policy or overall left-right position. The second key implication is that not all women's interests are alike. The translation of women's policy demands into outcomes depends on how those demands map onto traditional (class-based) political cleavages, or perhaps how costly they are to implement.

Finally, this research has potential implications beyond gender quotas, adding to the growing evidence that gender-related institutions can have significant impacts on policy agendas and outcomes that warrant further exploration (Kittilson 2010). To the best of the author's knowledge, this is the first study to find a direct effect of quota laws on party priorities. The results complement work that shows women in the party matter (Kittilson 2011; Greene & O'Brien 2016), suggesting that the imposition of a quota law itself can also have spillover effects on other policies. More research is needed to test the contagion mechanism proposed here, and the conditions under which party leaders respond to women's policy preferences. Future studies might dig deeper into these questions through more fine-grained text analysis of manifestos, media analysis before and after quota implementation, and interviews with key actors in the manifesto creation process.

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Appendix for "Quotas and Party Priorities: Direct and Indirect Effects of Quota Laws"

The following Appendix includes supplementary information on (A) the matching procedure, (B) summary statistics, (C) potential moderators, and (D) robustness checks.

A. Details of Matching Procedure

In this section, I describe the selection of five matching variables that might influence the probability of adopting a quota law and party priorities, as well as other variables considered for matching, technical details of the matching process, and diagnostics of the matching procedure.

First, most of the countries that pass quota laws are characterized by low levels of women's representation before the law is passed. The percentage of women in parliament is also perhaps the best proxy available for attitudes towards women in politics (see e.g., Norris 1985), a potential confounder that is very difficult to measure over time. Greater shares of women in political parties are also associated with shifts in party agendas (Kittilson 2011).

Relatedly, left parties are more likely to prioritize women and gender equality – including support for quota laws – than are right parties (Kittilson 2006; Keith & Verge 2016). I thus match on party family to ensure that the parties being compared are similar in ideology. The party family variable also helps to control for international policy diffusion, since similar parties often have close ties to each other across countries which affect both the likelihood of quota adoption and party priorities (Krook 2006, 2008). Third, previous experience with voluntary gender quotas within the party system is likely to increase the chances of a quota law being adopted in that country (Henig 2002; Matland 2005), and potentially also shift party emphasis by increasing numbers of women. Finally, I match on both vote share and year to control for party size and time trends, both

of which could be related to women's opportunities in politics and party priorities. For example, smaller, niche parties might be more likely to take up special issues like equality because they are not constrained by a history of emphasizing traditional left-right issues (Kittilson 2011).

I considered matching on other potential confounders. Research has highlighted the importance of strong women's movements advocating for change, especially women's sections in the party (Kittilson 2006; Dahlerup 2006). Unfortunately it is very difficult to measure the presence or strength of women's movements or party sections across countries over time. Data on the existence of women's sections over time do not exist for my sample of parties. Htun and Weldon (2012) provide valuable data on the strength and autonomy of feminist women's movements over time in 70 countries. However, as noted in the text, women's movements are not considered to be a significant factor in quota adoption in the countries I study, save for the case of France. Indeed, the Htun and Weldon data show that there was no change in the strength or autonomy of women's movements in Belgium, France, and Portugal before a quota law was passed. In the remaining two countries, Italy and Spain, the strength of feminist women's movements actually declined before the quota law passed (autonomy remained the same). In summary, the evidence suggests that a trend towards strong, autonomous women's movements is not present before quota laws are passed in these countries.

While I would ideally like to match on other underlying party- and country- characteristics, a larger number of covariates will increase the distance between units in the covariate space, meaning matched pairs will be generally further apart (Nielsen & Sheffield 2012). However, I do adjust for other variables in the post-matching regression analysis, namely: female labor force participation and GDP per capita (both linked to attitudes towards women, like the matching variable women in the party).

I use nearest neighbor, Mahalanobis matching. Nearest neighbor matching selects the single best control match for each 'treated' unit (i.e., party in a country that passes a quota law).

Matching is done using a distance measure, and here the Mahalanobis option is used because it allows for continuous covariates (Ho et al. 2011). I use exact matching for party family, as ideology is perhaps the most important identifying characteristic of a party. The matched data thus allow us to compare how quotas affect party priorities across similar types of parties, broadly speaking. The rest of the matches are selected based on Mahalanobis distance (for technical details, see Rubin 1973).

The matching process reduced the multivariate imbalance statistic from 0.95 to 0.75, significantly improving the balance of the sample. Graphical diagnostics of the matching procedure are reported below in Figure A1. Figure A1 displays quantile-quantile (QQ) plots, which plot the distribution of the covariates amongst countries that implemented ('Treated Units', on the y-axis) and did not implement ('Control' Units, on the x-axis) a gender quota law. The closer the plot lies to the 45-degree line, the greater the confidence that treated and control samples are drawn from the same distribution (balanced). On inspection, four out of five matched covariate plots are closer to the 45-degree line than the full data sample. The plot for party quota ("lag1.partyquota") does not indicate significant improvement, but the matched sample appears no worse than the full data sample (in fact, the summary statistics indicate 19% balance improvement for the party quota variable in the matched data). The QQ-plots thus demonstrate that matching produces good balance on these covariates overall. Because the matched data is more balanced on covariates than the full data set, treatment and control units are more comparable and modelling assumptions (such as which parametric model to use) have less influence on the results of analysis (King & Zeng 2006*b*; Ho et al. 2007). As Nielsen and Sheffield (2009) point out, model dependence is especially likely when observations that have different values on the key variable of interest (here, quota law) also have very different values on other variables.

Table A1 below shows the matched pairs resulting from the matching procedure.

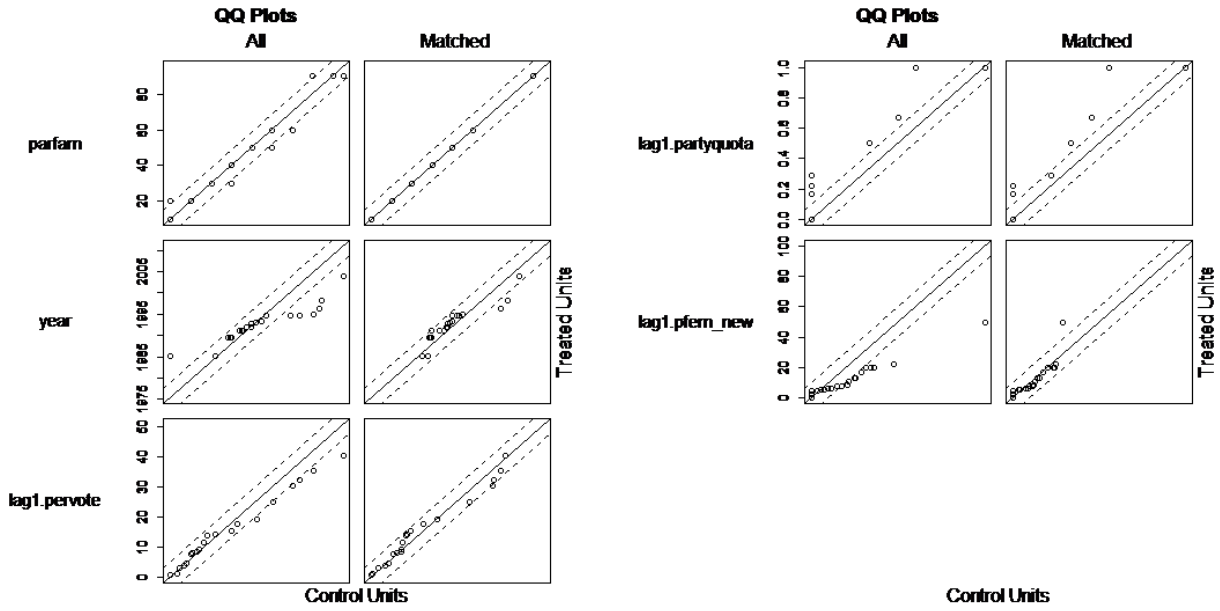

Figure A1: Quantile-Quantile Plots

Notes: The "parfam" variable is party family categorization from the comparative manifesto data, "year" is the election-year, "lag1.pervote" is the vote share of the party lagged by one election-year, "lag1.partyquota" is an indicator variable for whether the party had a voluntary internal quota, lagged by one election year, and "lag1.pfem$_{new}$" *is the share of women in the parliamentary party, lagged by one election − year*.

Table A1: Matched pairs

	Party affected by quota law	Matched party
1	Belgium Ecologists	Italy Green Federation
2	Belgium Flemish Socialist Party	Italy Italian Socialist Party
3	Belgium Francophone Socialist Party	Ireland Labour Party
4	Belgium Open Flemish Liberals and Democrats	Belgium Liberal Reformation Party
5	Belgium Christian Democratic and Flemish	Italy Christian Democrats
6	Belgium Christian Social Party	Norway Christian People's Party
7	Belgium Flemish Bloc	Spain Basque Left
8	France French Communist Party	Japan Japanese Communist Party
9	France Socialist Party	Canada New Democratic Party
10	France Democratic Movement	Sweden Moderate Coalition Party
11	Spain United Left	Italy Communist Refoundation Party
12	Spain Spanish Socialist Workers' Party	Germany Social Democratic Party of Germany
13	Spain Popular Alliance	Australia Liberal Party of Australia
14	Spain Convergence and Union	New Zealand First Party
15	Spain Basque Nationalist Party	Spain Aragonese Regionalist Party
16	Spain Canarian Coalition	Finland Swedish People's Party
17	Portugal Portuguese Communist Party	Greece Communist Party of Greece
18	Portugal Socialist Party	United Kingdom Labour Party
19	Portugal Social Democratic Party	New Zealand Labour Party
20	Portugal Social Democratic Center - Popular Party	Japan Clean Government Party

B. Summary Statistics for Data Used in Analysis

The following tables present summary statistics for both the matched data set (Table B1) and the full data set used for matching (Table B2). *Social Justice*, *Welfare State Expansion*, *Vote Share*, and *Right Party* come from the Comparative Manifesto Project (Manifesto Project MRG/MARPOR/MARPOR) Version 2016b (Volkens et al. 2016). *Right Party* includes the parties categorized by MARPOR as Liberal, Christian Democrat, Conservative, or Ethnic and Regional. *Left-Right Position* comes from Lowe et al. 2011's log ratio scale. ♀ *Labor Force Participation* comes from OECD Labour Statistics (2017). *Effective no. parties* comes from the Comparative Political Data Set, CPDS 2014 (Armingeon et al. 2014), and *GDP per capita* comes from the Comparative Welfare States Data Set, 2014 (Brady, Huber & Stephens 2014). *Women in Party* comes from Greene and O'Brien (2016), supplemented by original data collection. Original data for a subset of parties / countries was collected using parliamentary websites, secondary literature, and newspapers, particularly for recent election-years. Original data for *Party Quota*, a binary variable, was compiled using party documents, secondary literature, and correspondence with political party representatives.

Table B1: Summary Statistics, Matched Data

Statistic	N	Mean	St. Dev.	Min	Max
Social Justice	282	5.166	4.400	0.000	23.100
Welfare State Expansion	282	8.699	5.384	0.000	31.381
Left-Right Position	282	−0.406	0.863	−2.944	1.790
Quota Law$_{(t-1)}$	282	0.089	0.285	0	1
Quota Impact(t-1)	282	0.620	0.336	-40	50
Party Quota$_{(t-1)}$	282	0.191	0.394	0	1
♀ Labor Force Part.$_{(t-1)}$	282	40.86	4.604	26.65	48.42
Vote Share$_{(t-1)}$	282	18.147	13.636	0.000	51.287
Effective no. parties$_{(t-1)}$	282	3.811	1.959	1.690	9.080
GDP per capita$_{(t-1)}$	282	20,465.370	6,651.328	7,072.481	42,817.280
Women in Party$_{(t-1)}$	282	14.228	13.502	0.000	97.000
Right Party	282	0.450	0.498	0	1

Looking at the differences between matched and unmatched data (Tables B1 and B2), the

Table B2: Summary Statistics, Full Data Set

Statistic	N	Mean	St. Dev.	Min	Max
Social Justice	837	5.124	4.843	0.000	32.300
Welfare State Expansion	837	7.984	6.188	0.000	58.333
Left-Right Position	837	−0.252	1.046	−4.779	3.476
Quota Law$_{(t-1)}$	837	0.035	0.183	0	1
Quota Impact(t-1)	837	0.193	0.114	-40	50
Party Quota$_{(t-1)}$	837	0.140	0.347	0	1
Vote Share$_{(t-1)}$	837	19.541	14.618	0.000	56.668
♀ Labor Force Part.$_{(t-1)}$	837	41.74	4.738	26.65	48.42
Effective no. of parties$_{(t-1)}$	837	3.853	1.550	1.690	9.080
GDP per capita$_{(t-1)}$	837	22,382.160	7,830.571	7,072.481	66,411.240
Women in Party$_{(t-1)}$	837	19.638	17.046	0.000	100.000
Right Party	837	0.556	0.497	0	1

samples are similar in many respects: e.g., attention to social justice, left-right position, vote share. The matched sample is characterized by lower levels of women's representation, development, and female labor force participation, which fits well with what we know about determinants of quota adoption in advanced democracies (and share of women in the party before a quota was a variable used in matching). The average attention to welfare state expansion is also higher in the matched data, which makes sense if these countries have on average lower levels of welfare spending. These differences highlight that in terms of external validity, the scope of implications of this research is somewhat limited by the types of countries that tend to adopt quota laws. For example, a counterfactual 'control' country that comes up often in the matching process is Italy (see Table A1, Appendix A).

C. Potential Moderators

Below I consider whether party ideology and party quotas condition the effects of a quota law. Model 1 of Table C1 tests this by including an interaction between *Quota Law* and *Right Party* in the baseline specification (Model 1 of Table 1). The variable *Right Party* is a binary variable that codes as 1 parties characterized by MARPOR as Liberal, Christian Democrat, Conservative, or Ethnic and Regional; coded as 0 are left-wing Ecological, Socialist, and Social Democratic parties. Note that the constitutive term for *Right Party* cannot be included in the model due to the inclusion of party-level fixed effects, but it is fully accounted for in the fixed effects.

The coefficient on the interaction term in Model 1 of Table C1 is negative, but not statistically significant. The coefficient on *Quota Law* increases in size to 6.9, and can now be interpreted as the effect of a quota law on social justice priorities among left parties. This suggests that the effect of a quota law on social justice priorities is larger for left parties, although the difference between left and right parties is not statistically significant.[1] These results suggest no evidence that quota effects are conditioned by party ideology.

Figure C1 visually depicts the relationship between quota laws, party ideology, and social justice. The figure plots the estimated coefficient for social justice against party ideology (left and right). Moving from a right to left party increases the effect of a quota law by 2 and a half percentage points, although the confidence intervals clearly overlap. I interpret this result as evidence for increased party competition over gendered policies after a quota across parties.

[1] As a robustness check, I also fit a model including an interaction between *Quota Law* and *Women in Party*, which is not significant at conventional levels (in line with previous results).

Table C1: Moderated Effects of Quota Laws on Policy Priorities

	Dependent variable:	
	Social Justice	Social Justice
	(1)	(2)
Quota Law$_{(t-1)}$	6.951^{***}	4.603^{**}
	(2.048)	(1.604)
Quota Law$_{(t-1)}$× Right Party	-2.489	
	(2.292)	
Party Quota$_{(t-1)}$	0.423	-0.047
	(0.947)	(0.835)
Quota Law$_{(t-1)}$× Party Quota$_{(t-1)}$		2.439.
		(1.277)
♀ Labor Force Part.$_{(t-1)}$	0.105	0.849
	(0.215)	(2.100)
Vote Share$_{(t-1)}$	0.013	0.011
	(0.031)	(0.031)
Effective no. of parties$_{(t-1)}$	-0.142	-0.162
	(0.582)	(3.39)1
Log(GDP per capita$_{(t-1)}$)	-0.108^{***}	0.0243^{***}
	(0.033)	(0.013)
Constant	104.434^{***}	106.838^{***}
	(30.190)	(24.289)
Observations	282	282
R^2	0.657	0.655
Adjusted R^2	0.505	0.504
Year fixed effects	Yes	Yes
Party fixed effects	Yes	Yes

$^{\cdot}$p<0.1; *p<0.05; **p<0.01; ***p<0.001

Note: Robust standard errors clustered around election in parentheses.

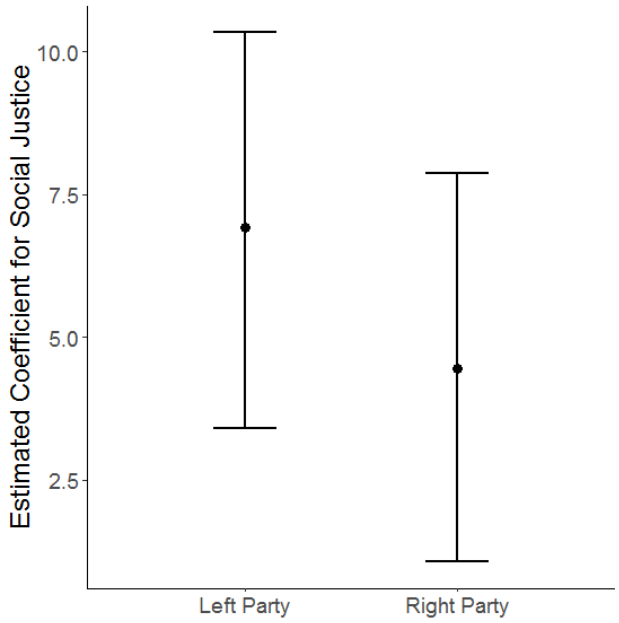

Figure C1: Predicted Change in Social Justice as a Function of Quota Law and Party Type
Notes: Predicted values are based on regression results shown in Model 1 of Table C1. The units on the x-axis represent left and right parties, and the units on the y-axis represent percentage point change in party attention to social justice.

I also consider whether having a voluntary party quota conditions the effects of a quota law. Model 2 of Table C2 includes an interaction between *Quota Law* and *Party Quota*. The coefficient on the interaction term in Model 2 of Table C1 is positive, and borderline statistically significant (p = 0.06). The coefficient on *Quota Law* decreases to 4.6, and can now be interpreted as the effect of a quota law on social justice among parties with no party level quotas. Figure C2 shows the predicted change in social justice emphasis as a function of quota law and party quotas, and it shows that for parties with an internal quota the size of effect increases to about 7. This suggests that the effect of a quota law on social justice emphasis is larger for parties with a party quota, although again confidence intervals overlap. These results suggest that quota effects are partially driven by parties with internal quotas, although effects still exist for parties without these provisions.

Another way of exploring heterogeneous treatment effects is looking for differences across

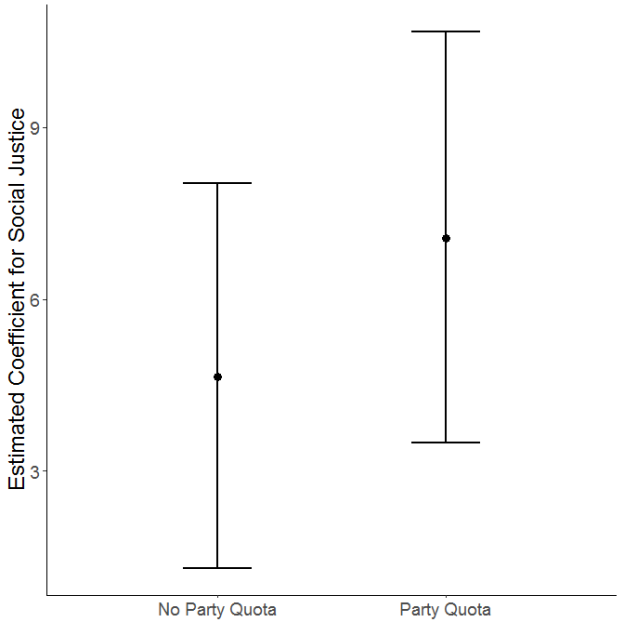

Figure C2: Predicted Change in Social Justice as a Function of Quota Law and Party Quota

Notes: Predicted values are based on regression results shown in Model 2 of Table C1. The units on the x-axis represent parties with and without internal party quotas, and the units on the y-axis represent percentage point change in party attention to social justice.

countries. While I confirm that results hold while dropping each country sequentially from the data set (Appendix D), I also ran a model including interactions between the quota law variable and country dummies. None of these interactions were significant, indicating that the effect is not driven by one country in particular.

D. Robustness checks

This section includes the results of robustness checks to ensure that findings are not the result of model misspecification. First, I show results from the main specifications (Table 1) using the full, unmatched data set (Table D1). Table D2 presents results from regressions that use the *Quota Impact* variable, defined as the change in women's descriptive representation following quota implementation (rather than a binary variable). Table D3 presents models using a lagged dependent variable, which accounts for autocorrelation, rather than fixed effects.[2] In Table D4 I specify models that include no control variables (but retaining fixed effects), and in Table D5 models that lag all control variables by 2 election-years, to account for potential post-treatment bias (King & Zeng 2006*a*).

Table D6 presents results using data where the political parties that were responsible for proposing quota laws are removed from the dataset. These are: the Flemish Social Democrats (SPA) and the Christian Democratic and Flemish (CD & V) in Belgium, the Democratic Party of the Left in Italy, the Socialist Party in France, the Socialist Workers' Party in Spain, and the Socialist Party in Portugal. Many of the parties that remain in the sample did not support a quota law and indeed campaigned and voted against it. I make the claim that because the quota law was imposed on these parties without their support, we can view it as a plausibly exogenous source of change in the political atmosphere and numbers of women required for the remaining parties. I find that results do not change; in fact, the size of effects is slightly larger when parties that proposed the quota law are excluded (e.g., the coefficient for quota law is 5.92 for this sample compared to 5.65 in the original sample). One interpretation of these results is that parties that did not support a quota law are over-compensating after the fact by paying more attention to 'women's issues'.

Table D7 presents results from regression where all right-side variables are not lagged.

[2]Including both a lagged dependent variable and fixed effects is not recommended because it requires much more demanding conditions for consistent estimation (Angrist & Pischke 2008, 245-6).

One concern might be that the lagged quota law variable does not capture the effects of quota laws on women's representation in the first election of implementation, and this might be where we ought to expect the largest shifts. This might bias effects of quota laws downwards. To address this concern I estimate models of main results which include measures of quota law and covariates that are not lagged. Table D7 shows that results hold in these models; quota laws are not associated with a short-term increase in women's representation at the party level, and quota laws still have an effect on social justice emphasis, although it is decreased and borderline statistically significant. Because manifestos are written before elections, I prefer the main specifications in text for ease of interpretation.

This result is somewhat unexpected, since most research shows that quota laws increase women's representation at the national level (Paxton, Hughes & Painter 2010; Hughes 2011; Paxton & Hughes 2015, but see Hughes 2009). Still, an important finding is that policy design matters; higher thresholds, placement mandates, and strict enforcement mechanisms have been shown to enhance quota effectiveness (Schwindt-Bayer 2009). Both France and Portugal fine parties rather than require compliance to run candidates. While the Spanish law requires compliance for list submission, representation in Spain was high before the law, and research has illustrated that parties get around it in creative ways (Esteve-Volart & Bagues 2012). Differences between findings using party and national level data could be attributed to the context of these countries (weak laws), and might also suggest that smaller, less electorally-relevant parties in particular are not complying.

Table D8 presents results from tests of the common trends assumption; Model 1 includes leads and lags of quota implementation and Model 2 includes party-specific time trends. Model 1 is reassuring in that it shows no 'placebo' effect of the quota law before we ought to expect it to impact social justice priorities. In Model 2 the results do change: the coefficient on quota law decreases to 1.38 and p-value increases to .21. While gradual changes are hard to pick up with party-specific time trends (the assumption here is a sharp change at implementation), these results

also suggest that it's not possible to fully disentangle underlying trends from the causal effect of quotas.

In other tests not shown here but available from author, I ran country fixed effects instead of party fixed effects, and included linear and nonlinear time trends. The results do not change. Finally, I exclude one country at a time and re-estimate specifications, to ensure that results are not driven by factors specific to a single country. My findings are robust to these alternative specifications. While some countries are found to be more influential than others – for example, estimates of the impact of quota law on social justice decrease when Belgium, the country which has had a quota law the longest, is excluded from the sample – the estimates for quota law remain positive and significant upon elimination of any country from the sample.

Table D1: Regression Results, Full Data Set

	Dependent variable:		
	Social Justice	Welfare State Expansion	Left-Right Position
	(1)	(2)	(3)
Quota Law$_{(t-1)}$	4.174^{***}	0.439	-0.034
	(0.952)	(1.585)	(1.585)
Party Quota$_{(t-1)}$	1.720^{***}	-0.643	0.174
	(0.497)	(0.882)	(0.882)
♀ Labor Force Part.$_{(t-1)}$	25.915^{*}	9.082	-0.431
	(13.093)	(14.769)	(14.769)
Vote Share$_{(t-1)}$	-0.009	-0.002	0.002
	(0.023)	(0.037)	(0.037)
Effective no. of parties$_{(t-1)}$	0.266	-0.540	0.124^{*}
	(0.414)	(0.434)	(0.434)
Log(GDP per capita$_{(t-1)}$)	-0.075^{*}	-0.066^{*}	0.001
	(0.030)	(0.029)	(0.029)
Constant	67.637^{***}	64.645^{**}	-1.799
	(24.632)	(26.698)	(26.698)
Observations	837	837	837
R^2	0.517	0.462	0.706
Adjusted R^2	0.388	0.318	0.627
Year fixed effects	Yes	Yes	Yes
Party fixed effects	Yes	Yes	Yes

$^{\cdot}$p<0.1; *p<0.05; **p<0.01; ***p<0.001

Note: Robust standard errors clustered around election in parentheses.

Table D2: Regression Results, Using 'Quota Impact' Variable

	Dependent variable:		
	Social Justice	Welfare State Expansion	Left-Right Position
	(1)	(2)	(3)
Quota Impact$_{(t-1)}$	0.030	0.005	−0.001
	(0.040)	(0.056)	(0.002)
Party Quota$_{(t-1)}$	0.842	−0.162	0.145
	(0.932)	(1.157)	(0.153)
♀ Labor Force Part.$_{(t-1)}$	0.117	0.188	0.004
	(0.226)	(0.230)	(0.029)
Vote Share$_{(t-1)}$	0.000	−0.132*	0.018*
	(0.031)	(0.054)	(0.007)
Effective no. of parties$_{(t-1)}$	−0.168	0.069	0.157.
	(0.574)	(0.658)	(0.083)
Log(GDP per capita$_{(t-1)}$)	−12.268***	−2.87	−0.345
	(3.519)	(4.005)	(0.493)
Constant	117.367***	16.745	3.777
	(33.016)	(35.916)	(4.600)
Observations	282	282	282
R^2	0.63	0.550	0.732
Adjusted R^2	0.469	0.355	0.616
Year fixed effects	Yes	Yes	Yes
Party fixed effects	Yes	Yes	Yes

$^{\cdot}$p<0.1; *p<0.05; **p<0.01; ***p<0.001

Note: Robust standard errors clustered around election in parentheses.

Table D3: Regression Results, with LDV (no FE)

	Dependent variable:		
	Social Justice	Welfare State Expansion	Left-Right Position
	(1)	(2)	(3)
Quota Law$_{(t-1)}$	1.913^{***}	0.777	-0.214
	(0.561)	(1.384)	(0.13)
Party Quota$_{(t-1)}$	0.849^{*}	0.648	-0.124
	(0.482)	(0.750)	(0.089)
♀ Labor Force Part.$_{(t-1)}$	-0.012	0.094	0.011
	(0.066)	(0.090)	(0.010)
Vote Share$_{(t-1)}$	-0.013	-0.008	0.008^{**}
	(0.013)	(0.019)	(0.002)
Effective no. of parties$_{(t-1)}$	-0.021	0.188	0.029
	(0.112)	(0.188)	(0.021)
Log(GDP per capita$_{(t-1)}$)	-1.257	0.495	0.013
	(1.031)	(1.010)	(0.214)
LDV	0.562^{***}	0.426^{***}	0.635^{***}
	(0.111)	(0.067)	(0.047)
Constant	88.615^{***}	-4.463	-0.992
	(31.009)	(9.298)	(1.805)
Observations	282	282	282
R^2	0.343	0.268	0.515
Adjusted R^2	0.326	0.249	0.503
Year fixed effects	No	No	No
Party fixed effects	No	No	No

$^{\cdot}$p<0.1; *p<0.05; **p<0.01; ***p<0.001

Note: Robust standard errors clustered around election in parentheses.

Table D4: Regression Results, No Control Variables (FE Retained)

	Dependent variable:		
	Social Justice	Welfare State Expansion	Left-Right Position
	(1)	(2)	(3)
Quota Law$_{(t-1)}$	6.820^{***}	2.174	0.452
	(1.800)	(2.203)	(0.279)
Constant	11.856^{***}	-2.264	1.608^{***}
	(2.476)	(2.383)	(0.332)
Observations	282	282	282
R^2	0.620	0.536	0.718
Adjusted R^2	0.468	0.351	0.607
Year fixed effects	Yes	Yes	Yes
Party fixed effects	Yes	Yes	Yes

$^{\cdot}$p<0.1; *p<0.05; **p<0.01; ***p<0.001

Note: Robust standard errors clustered around election in parentheses.

Table D5: Regression Results, Lagging Control Variables by 2 Election-Years

	Dependent variable:		
	Social Justice	Welfare State Expansion	Left-Right Position
	(1)	(2)	(3)
Quota Law$_{(t-1)}$	5.652**	1.023	0.361
	(1.932)	(2.427)	(0.328)
Party Quota$_{(t-2)}$	−0.278	−0.979	0.329**
	(0.797)	(1.372)	(0.121)
♀ Labor Force Part.$_{(t-2)}$	0.436	0.022	1.184
	(2.555)	(2.788)	(0.359)
Vote Share$_{(t-2)}$	0.011	−0.125*	0.010
	(0.028)	(0.061)	(0.007)
Effective no. of parties$_{(t-2)}$	−0.398	0.353	−0.072
	(0.668)	(0.963)	(0.082)
Log(GDP per capita$_{(t-2)}$)	−9.309**	−0.803	0.178
	(3.125)	(5.077)	(0.550)
Constant	88.615***	12.403	−0.483
	(31.009)	(48.226)	(5.250)
Observations	249	249	249
R^2	0.637	0.583	0.742
Adjusted R^2	0.455	0.373	0.613
Year fixed effects	Yes	Yes	Yes
Party fixed effects	Yes	Yes	Yes

·p<0.1; *p<0.05; **p<0.01; ***p<0.001

Note: Robust standard errors clustered around election in parentheses.

Table D6: Regression Results, Excluding Parties that Proposed a Quota

	Dependent variable:		
	Social Justice	Welfare State Expansion	Left-Right Position
	(1)	(2)	(3)
Quota Law$_{(t-1)}$	5.917***	1.868	0.397
	(1.427)	(2.465)	(0.289)
Party Quota$_{(t-1)}$	−1.108	−0.634	0.103
	(1.057)	(1.812)	(0.214)
♀ Labor Force Part.$_{(t-1)}$	.144	0.228	−0.001
	(0.209)	(0.248)	(.030)
Vote Share$_{(t-1)}$	−0.023	−0.208**	0.020*
	(0.047)	(0.069)	(0.010)
Effective no. of parties$_{(t-1)}$	−0.400	−0.103	0.213*
	(0.539)	(0.809)	(0.088)
Log(GDP per capita$_{(t-1)}$)	−12.341***	−2.036	0.115
	(3.649)	(4.598)	(0.545)
Constant	117.613***	8.682	−0.483
	(33.092)	(41.361)	(4.579)
Observations	242	242	242
R^2	0.671	0.551	0.746
Adjusted R^2	0.507	0.328	0.619
Year fixed effects	Yes	Yes	Yes
Party fixed effects	Yes	Yes	Yes

·p<0.1; *p<0.05; **p<0.01; ***p<0.001

Note: Robust standard errors clustered around election in parentheses.

Table D7: Regression Results, Covariates not Lagged

	Dependent variable:	
	% Women in Party	Social Justice
	(1)	(2)
Quota Law	−3.221	1.838*
	(2.433)	(0.983)
Party Quota	5.956***	−0.058
	(1.742)	(0.850)
♀ Labor Force Part.	0.664	0.253
	(0.387)	(0.213)
Vote Share	0.183*	−0.080*
	(0.092)	(0.042)
Effective no. of parties	1.208	−1.126**
	(0.797)	(0.567)
Log(GDP per capita)	−4.825	−11.375***
	(5.941)	(3.579)
Constant	24.790	109.567***
	(55.398)	(33.619)
Observations	282	282
R^2	0.759	0.638
Adjusted R^2	0.654	0.481
Year fixed effects	Yes	Yes
Party fixed effects	Yes	Yes

·p<0.1; *p<0.05; **p<0.01; ***p<0.001

Note: Robust standard errors clustered around election in parentheses.

Table D8: Regression Results, Tests of Common Trends

	Dependent variable:	
	Social Justice	Social Justice
Quota Law$_{(t-2)}$	6.277^{***}	
	(1.950)	
Quota Law$_{(t-1)}$	4.698^{**}	1.381
	(1.972)	(1.102)
Quota Law	-1.059	
	(1.207)	
Quota Law$_{(t+1)}$	0.080	
	(1.497)	
Quota Law$_{(t+2)}$	1.182	
	(1.467)	
Quota Law$_{(t+3)}$	-0.580	
	(1.729)	
Party Quota$_{(t-1)}$	0.020	0.235
	(0.741)	(0.398)
♀ Labor Force Part.$_{(t-1)}$	0.158	-0.105^{*}
	(0.211)	(0.043)
Vote Share$_{(t-1)}$	0.006	0.019
	(0.029)	(0.647)
Effective no. of parties$_{(t-1)}$	-0.200	-0.225
	(0.656)	(0.753)
Log(GDP per capita)$_{(t-1)}$)	-11.094^{***}	-11.210^{***}
	(3.513)	(0.341)
Constant	104.984^{***}	-324.993
	(30.777)	(584.659)
Observations	282	282
R^2	0.667	0.718
Adjusted R^2	0.510	0.502
Year fixed effects	Yes	Yes
Party fixed effects	Yes	Yes
Party-specific time trends	No	Yes

$^{\cdot}$p<0.1; *p<0.05; **p<0.01; ***p<0.001

Note: Robust standard errors clustered around election in parentheses.

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